

ABSTRACT OF THE DISCLOSURE

An artificial disc replacement (ADR) is designed to protect a cushioning component from excessive force. Physical features on the front and back of the ADR enable the device to replicate the normal movements of the spine through predetermined, limited, movements of the endplate components relative to one another.

5 For example, though not limited to these characteristics, the components of the ADR could be dimensioned to allow 15 degrees of flexion, 5 degrees of extension, 5 degrees of lateral bending, and 1-2mm of translocation. In the preferred embodiment the physical features are axles that extend through overlapping lateral portions associated with the endplate components. A desirable configuration includes a pair of axles, one in

10 the anterior portion and another in the posterior portion, wherein some or all of the axles extend through an oversized aperture that allows the limited relative movement of the endplate components. Alternatively, the anterior and posterior physical features may include mating projections and depressions to permit a desired degree of relative movement.